## APPARATUS METHOD AND SYSTEM FOR INCREASED DIGITAL MEDIA RECORDING THROUGHPUT

## ABSTRACT OF THE DISCLOSURE

A source data stream is distributed to two or more compression paths that provide a corresponding number of compressed data streams that are concurrently encoded onto a recording medium as a set of media tracks. In one embodiment, buffer space within each compression path is monitored and the source data stream is directed to a 'starved' compression path. Metadata is inserted into the compressed data streams to facilitate reconstruction of the source data stream from the compressed data streams. The source data stream may be reconstructed by concurrently decoding the media tracks, decompressing the compressed data streams to a corresponding set of decompressed data streams, and merging the decompressed streams into an output data stream as directed by the metadata. The present invention overcomes the bottlenecks and other issues previously associated with context-based compression within digital media recording systems.